

ABSTRACT

DESIGN AND IMPLEMENTATION OF AVAILABILITY INFORMATION SYSTEMS OF SARONG AND DIGITAL IDENTITY ON SLIPPERS USING ULTRASONIC SENSORS AND RFID SENSORS BASED INTERNET OF THINGS

(Case Study: Nur Sulaiman Grand Mosque Banyumas)

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Indonesia has rules that every citizen is free to embrace their religion according to their respective beliefs, thus making the distribution of places of worship grow rapidly. One of them is the Great Nur Sulaiman mosque, which is located in Banyumas district. Visitors to the Nur Sulaiman Grand Mosque are not only from within the city but also from outside the city. So it requires maximum service in serving visitors. Such as the system for borrowing sarongs and safety sandals. The problem of borrowing sarongs occurs because the number of available sarongs on the window of the mosque cannot be known, while the safety of the sandals uses paper numbering which has the disadvantage of being easily scattered. Therefore, making a system for borrowing sarongs and sandal security based on the Internet of Things can overcome this problem. With the test results on the sarong borrowing system, it has an error percentage of 2% and has an accuracy rate of 98.09%. Meanwhile, the sarong lending system has a success indicator of 100%.

Keywords: RFID sensor, ultrasonic sensor, internet of things